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Subject: FW: OW Management Report For Hurricanes Harvey, Irma and Maria for 9/22/2017
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Attachments: [OW Management Report Harvey Irma 9222017.docx](#)

From: EOC Water

Sent: Friday, September 22, 2017 4:08 PM

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Subject: OW Management Report For Hurricanes Harvey, Irma and Maria for 9/22/2017

Attached and pasted below is the OW Management Report for Hurricanes Harvey, Irma and Maria for 9/22/2017.

Lauren Wisniewski
EOC Water Desk

Hurricane Harvey Update (notes: Hurricanes Irma/Maria report starts on page 2; **updated information highlighted.**)

EPA HQ:

Water Desk Staffing for the coming week is as follows:

Friday 9/22: Lauren Wisniewski
 Saturday 9/23: Nushat Thomas
 Sunday 9/24: David Goldbloom-Helzner
 Monday 9/25: Nushat Thomas
 Tuesday 9/26: Brian Pickard
 Wednesday 9/27-Thursday 9/28: Jeff Fencil
 Friday 9/28: Kevin Tingley

Federal Activities:

Yesterday was the last day for response activities with no state cost-share. Cost-share increased to 10% at midnight today, September 22, 2017.

EPA Activities: Region 6:

Drinking Water / Wastewater Assessments

Drinking water and wastewater assessment teams completed their emergency assessments of community water systems and have demobilized. The information below is from the Texas Commission on Environmental Quality web site at <https://www.tceq.texas.gov/response/hurricanes>.

Drinking Water: From TCEQ website as of 9/21/17.

	Number of Drinking Water Systems	Population
Fully Operational	2,232	NA
Boil Water Notices	45	12,346
Shutdown	6	1,142

Wastewater and Sewage: From TCEQ website as of 9/21/17.

	Number of Wastewater Treatment Plants
Fully Operational	1,716
Inoperable	9
Operating with Issues	26

Hurricane Irma/Hurricane Maria Update

Hurricane Maria made landfall at Yabucoa in Puerto Rico's southeast shortly after 6 a.m. 9/20 with winds as strong as 155 m.p.h. It had crossed the United States Virgin Islands as a Category 5 storm, then weakened to a Category 4 storm as it passed over PR. The eye of the hurricane left Puerto Rico at noon between the coast of the municipalities of Barceloneta and Arecibo. Power is out throughout the island. Initial assessments are ongoing. The Governor said: "Our island is destroyed."

USVI – There are reports of widespread damage on St. Croix as a result of Hurricane Maria. EPA OSC on STX reports intermittent email and phone service. Very severe tree and power pole damage. The cargo section of the airport destroyed. Roads barely passable. Some are not.

With the approach of Hurricane Maria, all EPA USVI/PR response personnel were re-positioned to the U.S. mainland with exceptions for an EPA rep in St. Croix and others who sheltered in place in the USVI and PR.

Region 2 continues to reach out and contact Caribbean Environmental Protection Division (CEPD) personnel post storm. In Puerto Rico, communications are very difficult and a majority of employees have not yet been accounted for.

Region 2 is in contact with the Director and Deputy Director; they have been able to contact sixteen (16) employees. In the USVI both employees are safe and in contact with EPA responders. CID has made contact with only one of their two agents in PR.

CEPD Guaynabo office building received no visible damage. The building has water and is running on generator power. EPA OSCs will attempt to reach the power supply unit satellite sleds at the CEPD office on September 22nd and restore power to provide consistent communications and internet service.

The CEPD St. Thomas, USVI office has not been assessed post Hurricane Maria.

The San Juan Airport has been accepting military flights since September 21st and is expected to open for commercial flights on September 22nd. Operational hours are 0700 until 1700 ET daily.

FEMA flights will be available from Atlanta to PR/USVI between September 23 and 25. EPA will have six seats reserved for two teams of three responders who will assess priority drinking water and wastewater facilities in the USVI. Priorities will include those servicing hospitals and sensitive populations. Flights are expected to leave tomorrow. EPA will have an additional twenty seats reserved for EPA responders to return to the USVI with an expected departure date of September 25.

Local/State Activities:

Puerto Rico:

There is a 100% power outage in PR. All generation facilities are believed to be offline. Puerto Rico Electric Power Authority (PREPA) anticipates overflight damage assessments of transmission assets as soon as resources are available. Significant flooding and debris severely limit the ability to safely conduct damage assessments.

The President has signed Emergency Declaration FEMA-3391-EM for the Commonwealth of

Puerto Rico for Hurricane Maria.

U.S. Virgin Islands (USVI):

USVI Water and Power Authority waiting for St. Croix power plant and key switchgear to dry before line to the plant is re-energized, anticipated 9/22.

The President has signed Emergency Declaration FEMA-3390-EM for the Territory of the U.S. Virgin Islands for Hurricane Maria.

All Region 4 State EOCs, with the exception of Florida, are back to normal operations.

Federal Activities:

FEMA:

The FEMA RRCC in Colt's Neck NJ has transferred all operations from that location to the NRCC in Washington, D.C. Personnel are developing plans for the resumption of post-storm activities, including assessments at regulated facilities and NPL/Removal sites.

On 9/20, The President has signed a Disaster Declaration FEMA-4340-DR for the Territory of the U.S. Virgin Islands for Hurricane Maria.

Effective at 2330 on September 20, the FEMA Region IV Regional Response Coordination Center (RRCC) transitioned from Level II (full activation) to normal operations. All members of the RRCC were released, including those staffed under ESF-10.

EPA Activities:

Region 2:

The REOC Planning and Operations Sections are using Hurricane Irma assessment plans to develop post-Hurricane Maria plans for the assessment of fixed facilities, Superfund sites, critical infrastructure, areas of special concern, and debris management.

Most of the EPA response team will remain in Atlanta, GA to re-deploy with FEMA and the other Fed agencies once Maria passes through the region. For planning purposes, we are targeting Saturday, 9/23 to re-deploy. This date is flexible based on access to lodging, PR and USVI airport status, and other infrastructure and logistics concerns.

Region 4:

The EPA Region 4 Water Protection Division (WPD) received funding totaling \$75,000 under an ESF-3 MA sub-task to support the U.S. Army Corps of Engineers (USACE) drinking water and wastewater facility assessments. The WPD continues to coordinate with the Florida Department of Environmental Protection (FDEP) and the USACE.

The U.S. Army Corps of Engineers (USACE) requested additional EPA support under ESF-3 to contact Florida water utilities with “unknown” status. Water Team members in the R4 office began contacting wastewater facilities classified as status “unknown” on September 18th. The Region 4 Facility Assessment Support Team (FAST), completed 934 call-down assessments as of September 21st. EPA Water Team performed an assessment of the Waste Water Treatment Plant (WWTP) in Everglades City on September 21st. The water team will remain in the Naples area through September 22nd to evaluate the need for further water sector assistance. The Florida Department of Environmental Protection (FDEP) is developing plans for assessing the status of 3,561 non-community public water systems, and will submit the plan to the USACE/R4 FAST on September 25th.

Updated information is below under ‘Drinking Water and Wastewater System Status – Florida’

Drinking Water and Wastewater System Status

Region 2:

Puerto Rico Drinking Water Status: As of 1400 ET PRASA was operating 1,389 generators for drinking water, which we estimate to be providing approximately 21% of the population with drinking water. This does not include the non-PRASA systems which account for 4% of the PR population. Once these generators run out of gas, additional people will lose drinking water. PR has an island wide boil water order.

St. Croix water plant was re-energized on 9/22 and was ready to produce water once electricity was restored. St. Croix has a 12-day water supply as of 9/22.

Region 4:

Florida:

Boil Water Notices (BWN): Boil water notices and advisories are published on the Florida Department of Health’s website (<http://www.floridahealth.gov/environmental-health/drinking-water/boil-water-notices.html>). As of 1600 ET, the web site lists 475 BWN issued since September 11, of which 254 have been rescinded, resulting in 221 active BWN. The website reflects a lower number of BWN than in the table below, which was provided by Region 4 at 0900 ET.

[Boil Water Notices | Florida Department of Health](http://www.floridahealth.gov)

www.floridahealth.gov

It's a New Day in Public Health. The Florida Department of Health works to protect, promote

Water and Wastewater System Assessments:

The Everglades City WWTP became non-operational on September 13, and partially returned to service with generator power on September 19. The system start-up was hindered by weakened integrity issues. It is unclear if the leaks were only in the wastewater system. A team comprised of USACE and WPD will travel to Everglades City on September 21 to assess the water and wastewater facilities.

Water and wastewater facilities continue to submit their requests for assistance. The WPD compiled a status of community drinking water systems (CWS) and POTW that may be used during post-storm damage assessment in Florida (see the two tables below).

Total Number of Community Drinking Water Systems (CWS) and Total Population Served in Florida				
	Large CWS (Over 3,300)		Small CWS (under 3,300)	
	# Systems	Population Served	# Systems	Population Served
Operational:	389	19,095,277	1176	676,103
Partially Operational:	7	193,187	16	17,285
Non Operational:	0	0	7	1,226
Unknown:	0	0	45	15,939
Totals:	396	19,288,464	1,244	710,553
Boil Water Notices	271 (470 issued – 199 rescinded)			
Comments: Data is compiled from the State of Florida's StormTracker system. The inventory of public water systems in StormTracker consists of all 1,630 Community Water Systems (CWS) and 11 non-community public water systems regulated by the State. These facilities were identified by Florida as the most critical for operational status determinations following major disasters. For convenience, all 1,641 facilities are reported as "CWS" in this table.				
Operational: Facility producing drinking water for greater than 90% of customers under normal operating conditions				
Partially Operational: Facility producing drinking water under adverse conditions and/or supplying less than 90% of customers				
Non Operational: Facility not producing or supplying drinking water				
Unknown: Status of facility unknown at this time				

Total Number of Publicly-Owned Wastewater Treatment Plants (POTWs) All Florida Counties			
	NPDES Permitted Facilities		State Permits (Non-NPDES)
	POTW	Non-POTW (Industrial)	
Operational:	143	242	1,572
Partially Operational:	2	1	42
Non Operational:	0	0	111
Unknown:	0	0	289

Totals:	145	243	2,014
<p>Comments: Data is compiled from the State of Florida's StormTracker system. The NPDES universe tracked in StormTracker represents a subset of the total inventory of NPDES permitted systems that are identified by the State of Florida as the most critical for operational status determinations following major disasters.</p> <p>This report shows that 99% of the POTWs are Operational, an increase since the last report of 98%.</p> <p>This report shows that 99% of the Non-POTW NPDES Permitted Facilities tracked in StormTracker are Operational, an increase since the last report of 97%.</p> <p><u>Operational:</u> Facility & associated collection system is properly conveying, and effectively providing wastewater treatment, in accordance with applicable permit conditions and regulations. (Operating on full or backup generator power.)</p> <p><u>Partially Operational:</u> Facility and/or associated collection system is properly conveying and providing wastewater treatment at a compromised capacity, i.e. one or more treatment train components are non-operational, one or more lift stations are non-operational, etc.</p> <p><u>Non Operational:</u> Facility and/or associated collection system is not providing wastewater treatment in accordance with applicable permit conditions and regulations.</p> <p><u>Unknown:</u> Status of facility unknown at this time</p>			

Georgia:

This table summarizes community water system status within Georgia as per the last state report
(last update: 9/20/2017).

Total Number of Community Drinking Water Systems (CWS) and Total Population Served in Georgia		
	# Systems	Population Served
Operational:	186	7,203,619
Operational w/ Conditions:	8	53,917
Non Operational:	3	40,322
Unknown:	**	2,424,980
Totals:	1,749	8,917,820
Boil Water Notices	75 Boil Water Advisories reported to the SOC.	
Comments: Data is compiled from data collected by Georgia EPD drinking water staff, EPD regional offices and the ESF-3 Water Desk at the Georgia SOC. The inventory of public water systems in <i>Georgia</i> consists of all 1,749 Community Water Systems (CWS). **EPD has provided status updates of all community water systems with surface water sources. All community water systems using ground water are being contact by EPD District Offices and associated resources requests are forwarded to the SOC ESF-3 desk. All community water systems using surface water as a source have been assessed.		
<i>Operational: Facility producing drinking water for greater than 90% of customers under normal operating conditions</i>		
<i>Operational with Conditions: Facility producing drinking water under consumer advisory, e.g., boil water advisories issued by water systems.</i>		
<i>Non Operational: Facility not producing or supplying drinking water</i>		

Federally Recognized Tribes:

No significant updates were provided by the Region 4 Tribes during the reporting period.